

ABSTRACT OF THE DISCLOSURE

175 An Integrated Circuit (IC) package is disclosed comprising an IC chip with a
microcontroller therein having an n-bit data bus, and up to n pins electrically coupled to the
microcontroller. The IC package also includes a control register coupled to the microcontroller
for receiving enable and disable signals from the microcontroller. One or more of the pins have
one or more functional block associated thereto. Each functional block defines a specified
function for its corresponding pin. Thus, each pin having a plurality of corresponding functional
180 blocks has a number of potential functions equal to the number of corresponding functional
blocks. The specific function for a given pin is selected by the enable signal from the control
register which selects the appropriate functional block upon appropriate command from the
microcontroller. By using pins with multiple functions, the instant invention permits an n-bit
architecture microcontroller to use less than or equal to n pins.